

## Curricular and Pedagogical Reform

**FIPSE will continue to support innovative reforms of undergraduate, graduate, and professional curricula. We seek applicants proposing lasting transformations not only of what students learn but also how they learn. Proposed model programs should include a rigorous assessment of their impact on student learning. And they must be cost-effective and sustainable, for both the applicant institution and for others seeking similar solutions.**

### Northeastern University Boston, Massachusetts

#### "The Academic Common Experience"

Northeastern, a large, complex university with seven colleges offering a range of undergraduate liberal arts and professional degrees, has developed a new model for undergraduate education that assumes neither a campus-wide core curriculum nor a distribution requirement. Instead, the Academic Common Experience fully integrates general education into the major program. Faculty in major subjects are being asked to design curricula that fulfill a set a general education goals centered on: effective thinking and communication skills; information literacy; life management and personal skills; natural and social/cultural world contexts; development of historical, ethical, aesthetic, and personal perspectives; and drawing connections between academic study and work experiences. Evaluation of both student learning and programmatic success has been built into the program from the outset.

*Core Requirements and General Education:* One area of the undergraduate curriculum that requires continuing attention is the core or general education curriculum, typically comprising about one-third of bachelor degree course work. At their best, such curricula can translate lofty institutional mission statements into concrete programs for student academic development. But a proliferation of course offerings and lack of requirements, in the absence of clear educational goals, threatens to reduce general education to a freshman and sophomore year elective program. Conversations with students on many campuses suggest that students have little idea what general education is intended to accomplish, and hence no real basis for choosing a portfolio of general education courses. FIPSE welcomes proposals to make the goals of general education clear, and to guide and link course choices so that general education can serve its true purposes.

*The Sciences:* In recent years educators in mathematics, the sciences, humanities, and many professional fields have implemented a number of learner-centered reforms in both content and pedagogy, particularly at the introductory levels of their disciplines. Transformation in the social sciences has been slower, but is no less necessary. FIPSE encourages faculty in all disciplines to examine opportunities for rethinking curricular organization and content, as well as revolutionizing teaching techniques, at every level. Is it possible, for example, that the traditional organization of learning into "courses" will no longer be appropriate for learner-centered instruction in the coming century?

*Education for Careers:* It is increasingly important that curricula in all disciplines include preparation of students for the workplace. Because the United States is the only industrialized nation that does not have a formal apprenticeship system for helping young people make the initial transition from school to work, postsecondary institutions must join with employers and others in the development of other models for integrating work and learning, at all levels of education. Some may choose to explore innovations that build on existing models of cooperative education, tech-prep, or clinical programs. Others might try new adaptations of apprenticeship or internship models to be

**University of Rhode Island  
Kingston, Rhode Island**

**"A Model for the International  
Exchange of Students in  
Engineering and Business"**

Students in professional programs often find their study abroad opportunities limited by strict curricular requirements on their home campuses, differing curricula in other nations, and insufficient attention to second-language acquisition. The intense globalization of the world economy, however, has made it increasingly important that students in business and technology fields be trained to interact more effectively with counterparts throughout the world. Rhode Island's model, developed in collaboration with Technische Universität Braunschweig in Germany, incorporates several distinctive features, including: intensive language and culture programs for both students and faculty participants; long-distance tutoring via e-mail to familiarize future exchange students with each other and their respective universities; and extensive use of the Internet to facilitate student support services.

designed and managed cooperatively with employers. Such programs should ensure that students acquire the academic skills necessary for success now and in the future. In order to accomplish this objective, it may be necessary to define general academic competencies appropriate to a particular degree, and to expect students to master these in addition to meeting the occupational skills standards currently under development nationwide.

*International Education:* FIPSE encourages proposals spanning a broad range of international education topics and concerns. Fundable projects would view postsecondary education in a worldwide arena, which has become increasingly more connected. Proposed projects would clarify the ends and purposes of professional and academic areas of study within the global marketplace; create or renew academic, vocational, or professional curricula in international education; and assess the effectiveness of innovative courses, programs, or curricula within an international environment which requires a more concerted effort to meet educational challenges. Proposals are welcomed for projects which seek novel strategies for dealing with the international dimension of issues related to all aspects of postsecondary education, including foreign language acquisition, the social sciences, health sciences, and information technology.

In recent years, FIPSE has sponsored special competitions to link U.S. institutions with those in the European Union, Mexico, and Canada. Outreach to other parts of the world such as South America, Africa, and Asia is no less important, and FIPSE will continue to support such initiatives through the Comprehensive Program.

*Second Language Acquisition:* Students learn a second language for a variety of personal and professional reasons. FIPSE is particularly interested in proposals which create curricula that reflect students' varying goals in learning a foreign language, and which seek to take advantage of both classroom and nontraditional learning environments. Applicants might, for example, wish to explore new ways of teaching language and cultures in disciplinary contexts; to work with language acquisition specialists to create new learning materials that can be used both inside and outside the classroom; to develop educational materials that students can use beyond their college years as part of a lifelong language acquisition strategy; to provide students with opportunities to use their foreign language skills in practica or internships within a heritage language community in the United States; to experiment with computer conferencing and other distance technologies to link students across national borders in conversations and problem-solving; or to increase access to study abroad and international internships. The greatest gains in foreign language acquisition come when students begin at an early age, and applicants may wish to explore greater collaboration in language

training between school districts and postsecondary institutions. Similarly, applicants may wish to investigate collaborations between postsecondary institutions and heritage language schools, or collaboration with the foreign language centers sponsored by the U.S. Department of Education's Center for International Education.

*Technology and the Curriculum:* Finally, we note the enormous potential of technology to advance curricular reform in these areas and many more. FIPSE will continue to support efforts to develop cost-effective technology-mediated materials that promise to improve teaching and learning in and across the various disciplines. But applicants should note that many valuable materials, already developed and tested on campuses across the country, receive only isolated use because they have not been effectively disseminated to others. Applicants are therefore encouraged to conceive from the beginning of their projects better ways to share materials and expand pilot testing to other institutions. We particularly encourage proposals from faculty, disciplinary associations, and other professional communities to explore collaborative development of technological resources that have potential for wide application, to systematically evaluate the effectiveness of those resources in improving instructional quality, and to disseminate them to other interested practitioners through electronic media and other means.

*The Power of Distributed Learning Technologies:* Instructional technology is now being used for purposes that extend curricular and pedagogical reform beyond traditional classroom settings. For example, the growth of distance learning has proved that the classroom itself can be a virtual construct, enabling students to enroll in courses despite being remotely located from the institutions offering instruction. One of the great challenges to educators has been to use technology in ways that make student-faculty contact, communication with other learners, and engagement in problem-solving or other types of interactive learning as rich as in a good traditional classroom. This challenge is still relevant, especially now with the rapid growth in internet-based distance education.

We are now finding that even students enrolled in residential campus programs are interested in enrolling in distance education courses, using the online student services that are being developed for distance learners, and accessing resources far beyond those found in the local library. The lines between distance education and campus-based learning seem gradually to be blurring. Whether targeting remote distance learners or campus-based learners, applicants planning to use distributed learning technologies should seek to create solutions that are portable across institutions, and scalable to large numbers of students and institutions. Special attention should be paid to the incentives and rewards necessary for faculty to develop and implement new technology-based teaching strategies, to author professional-quality distributed learning resources, and to collaborate with others -- including non-teaching staff and representatives of industry or other relevant sectors. Some

**Prairie View A&M University  
Prairie View, Texas**

**"Developing Effective  
Performance Indicators for  
Different Learning  
Environments"**

Building upon previous efforts in assessment, the Prairie View A&M project is designed to produce a model performance-based assessment system that will assist in monitoring, rewarding, and publicizing educational quality. The project involves three campuses of the Texas A&M system and will focus on developing a common set of system and core indicators needed to measure performance in all institutions, as well as campus-specific indicators for institutions with differing missions. The project seeks to develop more precise and sophisticated measures than are commonly used, and to provide a model for public accountability and institutional improvement.

heretofore unquestioned assumptions about the roles of teaching faculty, the length of the academic term, the measurement of student progress, or other factors may have to be re-examined.

Applicants specifically interested in asynchronous, online distance education may wish to apply to the Learning Anytime Anywhere Partnerships (LAAP) program, another grant competition administered by FIPSE. (For information, see application materials at <http://www.ed.gov/FIPSE/LAAP>.) LAAP, however, only funds consortial partnerships that are devoted to “anytime anywhere distance learning” and are national or regional in scope. Many distance learning projects are still better suited to the Comprehensive Program. If you have questions, please consult a program officer.